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**Sent**: 12/27/2018 4:49:53 PM

**To**: Holst, Linda [holst.linda@epa.gov]

Subject: Fwd: Baby's death sparks water safety fight with the ag industry - StarTribune.com

Sent from my iPhone

Begin forwarded message:

From: Lynn Utesch < <a href="mailto:lnutesch@yahoo.com">lnutesch@yahoo.com</a>>
Date: December 26, 2018 at 11:44:25 AM MST

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Subject: Baby's death sparks water safety fight with the ag industry - StarTribune.com

http://www.startribune.com/baby-s-death-sparks-water-safety-fight-with-the-ag-

Baby's death sparks water safety fight with ag industry

Small-town Wisconsin residents take on state and powerful ag industry

Josephine Marcotty

industry/502477031/

WISCONSIN RAPIDS, Wis.

The battle began with a mother's anguished blog post about the death of her infant.

That was the catalyst for a hundred angry neighbors with undrinkable water who gathered at the Lake Aire Supper Club on a rainy September night to consider

an extraordinary step: suing one of the biggest players in the state's powerful agriculture industry.

"These people can do anything they want," said Dan Matthews, a retired paper plant worker, describing the giant dairy operation that spreads tons of manure each year on the corn and potato fields around his community. "There's an injustice in that."

The Central Sands region in the green heart of Wisconsin is prized for its water: dozens of small, sandy-bottomed lakes, the Wisconsin River and hundreds of miles of trout streams.

But the region has also become a flash point in the fights over water erupting throughout the Upper Midwest. In a part of the country where there's always been more than enough water to go around for fishing, swimming, drinking and farming, how do you share it and protect it in the face of rising demand?

In central Wisconsin, the conflict is driven largely by the proliferation of giant irrigation rigs that arc over mile after mile of flat farm fields. They make this one of the nation's most productive farm states, with \$88 billion a year in sales from food and food processing.

To many neighbors, however, they create an untenable drain on water that is tearing communities apart.

People in the Village of Plover, Wis., saw their favorite trout stream dry up, leaving thousands of dead fish for the raccoons. Nearby, recreational lakes ringed with summer homes have periodically shriveled into wetlands over the past 15 years, depressing property values and pitting lakeshore owners against the state government in a lawsuit over the meaning of public trust.

And Celina Stewart, a young mother in the tiny town of Nekoosa, lost an infant daughter to a fatal brain malformation that has been associated with high levels of nitrate, a fertilizer byproduct found in the community's drinking water. Her tragedy led to a community well testing program this year, which found that 40 percent of the homes had nitrate concentrations that, like hers, were far above the legal limit.

"We should be able to go to our faucet and turn it on and safely drink water from our well and not worry about getting sick or dying," Stewart wrote to the Wisconsin Department of Natural Resources (DNR). The Armenia Growers Coalition, a local farm group that includes the dairy, has offered to buy bottled water for neighbors or install home filtration systems, said spokesman Tim Huffcutt. It's also participating in a long-term investigation into solutions with state, federal and local health officials.

Huffcutt said that on land that has been farmed for decades, "there is significant likelihood that legacy agricultural practices going back as far as the 1950s contributed to elevated nitrate levels."

Nonetheless, in late November more than 80 residents with contaminated wells sued Central Sands Dairy and its owner, Wysocki Produce Farm, Inc. "They are pretty much at the end of their rope," said Breanne Snapp, an attorney who represents Stewart and others from the area.

## A big sandbox

The Central Sands area of Wisconsin, which stretches from Stevens Point south almost to Madison, didn't used to be much good for farming. It's like a sandbox, 100 to 200 feet deep, with porous soils that don't hold the nutrients or even the water that crops need to flourish.

That changed, first with the development of nitrogen fertilizer after World War II, and, even more critically, after the invention of the central-pivot irrigation rigs that can spray a consistent supply of water and chemicals across the fields. Now Central Sands is a leading producer of sweet corn, carrots, peas and the oblong potatoes prized by potato chip companies.

## HIGH CAPACITY WELLS MULTIPLY

In the Central Sands region, the number of wells with the capacity to pump more than 100,000 gallons of water per day has increased from fewer than 100 in the early 1950s to more than 3,200 today.

Source: Wisconsin Department of Natural Resources

Credit: Jeff Hargarten - Star Tribune

Today the region is also home to more than 2,000 agricultural irrigation wells — fully a sixth of Wisconsin's total.

To people in agriculture, the transformation is a credit to farmers' ingenuity.

"We feel we're using the water for a very noble purpose. We are growing healthy vegetables," said Tamas Houlihan, executive director of the Wisconsin Potato and Vegetable Growers Association.

Even so, conservationists, lakeshore associations and cabin owners say farmers are using more than their share — about 72 percent of all the water pumped in the region.

At times during the summer, Dan Trudell can watch his lake near Plainfield shrink daily as the high-capacity wells — 200 of them within a 5-mile radius — suck water out of the ground for crops. In the dry years from 2005 to 2009, some shallow lakes in this region south of Stevens Point either completely dried up or became wetlands, and at one point the Little Plover River disappeared.

Popular beaches closed. Boat launches and docks were left high and dry. And many cabin owners saw their property values shrink right along with the water — in a county where lakefront homes provide 30 percent of the tax revenue, Trudell said.

Jeremie Pavelski, co-owner of the 27,000 acre Heartland Farms south of Stevens Point, said irrigation is not to blame.

"Mother Nature is still queen," he said. "She controls everything, right?"

No question, Pavelski said, that in some dry years irrigation does draw down the lakes and streams. But then they bounce back again when it rains. This year is a case in point, he said. Torrential storms hit the region again and again this fall, making it one of the wettest on record. Many of the lakes are back up to where they once were, leaving the trees that sprouted up during dry years now drowning in high water.

In addition, he said, farmers have made great strides in controlling their water use. A case in point is his "war room" — a bright, open office where giant touch screen monitors display soil temperature, moisture, weather forecasts and other detailed, real-time data for each section of land — including precisely how much water the crop needs. Pavelski's staff can control irrigation through apps on their cellphones.

"Wisconsin farmers are what I would consider some of the most progressive in probably the world," he said.

Others say decades of science are proving that irrigation is affecting water levels, even in wet years. George Kraft, a hydrologist with the University of Wisconsin-Stevens Point who's studied the Little Plover River for years, said

that on average it's lost about 45 percent of its base flow — more than enough to damage the stream over time.

The core problem, conservationists say, is the state's failure to protect a public resource — water. In a lawsuit pending at the State Court of Appeals, they argued successfully that Wisconsin's state government has failed to preserve a critical natural resource that belongs to all its citizens, not just farmers. Attorneys say the case, filed by Clean Wisconsin and the Pleasant Lake Management Association, is destined to reach the state Supreme Court.

The crux of the argument is a 2016 opinion issued by Wisconsin Attorney General Brad Schimel, who said that, when making permitting decisions, the DNR could no longer consider the total impact of irrigation wells. "The Legislature has decided that it does not want DNR answering the how-much-istoo-much question," he wrote. "It has instead reclaimed for itself some of the responsibility for protecting Wisconsin waters."

Since then, the Legislature has funded a study to learn more about groundwater use and its impact on surface water.

But the same 2017 law also gave farmers the right to sell irrigation permits along with their land. Farm groups say it's justified because it's the wells that make the land valuable in the first place.

For others, it's a sign that Wisconsin farmers have already won the war over water.

"Because if you can buy and sell something, by God, you own it," said Kraft.

## Death of an infant

On the western edge of the Central Sands, irrigation has led to a different kind of crisis, this one tied to the arrival of a 6,000-head dairy operation owned by the Wysocki Family of Companies.

Armenia resident Mark Lochner said at first he was glad to see the long barns full of caramel-colored milking cows.

"We were for it," he said. "What other industry is going to come into our community?"

The cows, however, produce thousands of pounds of manure, which is spread as fertilizer on 7,000 acres of surrounding fields — land that couldn't be farmed without irrigation. Like commercial fertilizers, which are also used in the area, manure percolates swiftly through the sandy soils, spreading nitrate into the groundwater that everyone in Armenia uses for drinking.

Concern built quietly as residents heard stories about rising nitrate levels in private wells. It burst into public outrage in 2017 when Stewart blogged about the agonizing death of her baby girl.

"It was heart-wrenching," said Nancy Eggleston, environmental health supervisor for Wood and Juneau Counties. "It got the community thinking. And more concerned."

Nitrates have long been linked to a condition known as blue baby syndrome, which restricts oxygen in an infant's blood. But a handful of more recent studies have also linked them to neural tube defects, a malformation of the brain and spinal cord. The studies don't show that nitrates cause the malformation, but they found it occurs more often in pregnant women who are exposed to them. And the condition is almost always fatal for the fetus.

In her blog, Stewart described the tragic options she and her husband faced on learning that her baby would die even if carried to term.

"I have to make this choice. For my baby," Stewart wrote at the time. "I choose death, or choose suffering and death."

She chose to induce birth at 22 ½ weeks of pregnancy, knowing her baby could not survive. Stewart declined to be interviewed for this story. But in a public comment she submitted to the state, she said tests showed that nitrate in her drinking water rose from 15 parts per million in 2015 to 30 to 40 parts per million — three to four times the standard for safe drinking water — in 2016.

Testing by local health departments and the U.S. Environmental Protection Agency found many of her neighbors had the same levels. EPA testing also showed the nitrates came from commercial fertilizer, soil and septic tanks. About a third appeared to be associated with manure.

Now the Lochners and their neighbors are waiting to see what, if anything, the government will do. A DNR spokesman said in an e-mailed response to

questions that a coalition is working on a solution, with plans to conduct more testing of private wells.

In a letter to residents in August, the coalition of growers said they are "committed to responding to this matter in a positive manner."

"While there is still much we need to learn about this situation, the Armenia Growers Coalition wants to be part of the solution," they said.

## Uprising against feedlot

On the other side of the Wisconsin River, residents in the neighboring town of Saratoga took matters into their own hands. Almost every intersection is marked with a hand-painted, Pepto-Bismol-pink plywood sign in the shape of a cow, each one an emblem of the fierce community uprising against another large feedlot proposed by Wysocki.

After six years of political and legal fights, the feedlot appears to be stalled. Huffcutt, who is marketing director for Wysocki, said a final decision on the proposed dairy has not been made.

There's been an unexpected bonus to the battle, said Criste Greening, who quit her job to work on the campaign. "Six years ago we were a community of strangers," she said. "Now we are a community of family."

Dan Mahoney, administrator of the Village of Plover, is trying a different approach — using the community's shared affection for the sparkling Little Plover River.

"What have we accomplished at the state level?" he asked. "Nothing that the Village of Plover can see."

Mahoney created a task force of people with conflicting views and put them together at one table — conservation and farm groups, city and state officials. Some 300 acres of farmland around the trout stream are now being converted back to their natural state. One irrigation well has been removed, and another soon will be.

Kraft, the university hydrologist, is among the skeptics. By one estimate, 11 high-capacity wells in the small watershed would have to be removed to restore natural flow in the river, which he doubts is achievable.

Mahoney, however, is trying to change minds as well as the landscape. Which takes time.

"We see this as a lifelong effort," he said.

Sent from my iPad